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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,892	08/15/2000	Takashi Shinzaki	1075.1133/JDH	4113

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EXAMINER

HESELTINE, RYAN J

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/639,892	SHINZAKI ET AL.	
	Examiner	Art Unit	
	Ryan J Hesseltine	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 8-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/8/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claims 8-25 drawn to an invention nonelected with traverse in Paper No. 5 (received February 20, 2004). A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on June 8, 2004 was filed after the mailing date of the non-final rejection on May 19, 2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement. The examiner notes, however, that document AH (Document No. 63150781 published June 23, 1988 in Japan, listed as published in Europe), was previously cited by the examiner on form PTO-892 mailed May 19, 2004 and has therefore been lined through.

Response to Arguments

3. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 5 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa et al. (USPN 6,430,308, newly cited, hereafter Ogawa).

6. Regarding claim 1, Ogawa discloses a personal authentication system using biometrics (handwriting) information, which identifies or authenticates an individual by verifying to-be-verified biometrics characteristic data (obtained from to-be-verified biometrics information acquired at the time of the identification or authentication) against previously registered biometrics characteristic data (previously extracted for registration from to-be-registered biometrics information acquired at a time of user registration), said system comprising: a biometrics information (signature) inputting section 1 having a function to acquire the to-be-verified (inputted) biometrics information (column 4, line 27-44); a biometrics information converting (normalizing) section 3 converting said to-be-verified (inputted) biometrics information, acquired through said biometrics information inputting section, into a state to be acquired on a predetermined acquisition condition (position, size, number of samples), said predetermined acquisition condition being a same condition under which the registered biometric information was acquired (column 4, line 45-60; column 7, line 3-17); and a biometrics characteristic data extracting section 7 extracting to-be-verified biometrics characteristic data from the to-be-verified biometrics information obtained by the conversion in said biometrics information converting section (column 5, line 7-11; column 7, line 49-column 8, line 9). The examiner would like to point out that claim 1 discloses a personal authentication system comprising a biometrics information inputting section, a biometrics information converting section and a biometrics characteristic data extracting section, all of which include a description of their functional and intended use. While the examiner believes that Ogawa satisfies all of

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these functional limitations, it is also believed that any personal authentication system comprising a biometrics information inputting section, a biometrics information converting section and a biometrics characteristic data extracting section would be capable of performing the suggested functional limitations and would therefore satisfy the claim language. See MPEP § 2114, 2173.05(g). If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

7. Regarding claim 5, Ogawa discloses that said biometrics information inputting section is of a type acquiring said to-be-verified biometrics information as time series data (sampled over time; column 1, line 42-51; column 4, line 28-36), and said biometrics information converting section converts (normalizes) said to-be-verified biometrics information, acquired through said biometrics information inputting section, into time series data with a predetermined sampling period (regular time intervals) included in said predetermined acquisition condition (column 4, line 45-60; column 6, line 9-15).

8. Regarding claim 26, Ogawa discloses that before the converting (normalizing) by the converting section, the biometrics information inputting section acquires the to-be-verified biometrics information in a state according to another predetermined acquisition condition that is different than the predetermined acquisition condition under which the registered biometric information was previously acquired (column 4, line 28-60), and where after being converted (normalized) the state of the acquired to-be-verified biometrics information is a same state as the previously registered biometrics characteristic data (column 4, line 61-column 5, line 6; column 6, line 9-15; column 7, line 3-17).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2-4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa as applied to claim 1 above, and further in view of Setlak et al. (USPN 6,259,804, - previously cited, hereafter Setlak).

11. Regarding claim 2, Ogawa does not disclose that said biometrics information inputting section is of a type acquiring said to-be-verified biometrics information as image data. Setlak discloses a fingerprint sensor with gain control features and associated methods including a biometrics information inputting section is of a type acquiring to-be-verified biometrics information as image data (column 8, line 4-11), wherein a biometrics information converting section converts said to-be-verified biometrics information, acquired through said biometrics information inputting section, into image data with a predetermined resolution (dynamic range) included in said predetermined acquisition condition (column 2, line 58-column 3, line 10; column 10, line 64-column 11, line 15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to acquire said to-be-verified biometrics information as image data with a predetermined resolution as taught by Setlak in order to convert to-be-verified biometrics information into image data with a predetermined resolution to match the resolution under which registered biometric information was acquired and to prevent images from varying considerably from individual-to-individual and for different sensing conditions by

accommodating variations in image signal intensities such as between fingers, for different sensing conditions, or based on manufacturing process variations (column 2, line 35-57).

12. Regarding claim 3, Setlak discloses that said biometrics information inputting section is of a type acquiring said to-be-verified biometrics information as image data (column 8, line 4-11), and said biometrics information converting section converts said to-be-verified biometrics information, acquired through said biometrics information inputting section, into image data with a predetermined resolution (see above discussion of claim 2) and predetermined numbers of pixels in vertical and horizontal directions (column 5, line 47-58), included in said predetermined acquisition condition.

13. Regarding claim 4, Setlak discloses that said biometrics information inputting section is of a type acquiring said to-be-verified biometrics information as image data (column 8, line 4-11), and said biometrics information converting section converts said to-be-verified biometrics information, acquired through said biometrics information inputting section, into image data with a predetermined image characteristic (dynamic range) included in said predetermined acquisition condition (column 2, line 58-column 3, line 10; column 10, line 64-column 11, line 15).

14. Regarding claim 6, Setlak discloses that said biometrics information inputting section is of a type acquiring fingerprint information as said to-be-verified biometrics information in the form of image data (column 8, line 4-11), and said biometrics information converting section converts said to-be-verified fingerprint information, acquired through said biometrics information inputting section, into image data with a predetermined relationship (analog-to-digital conversion range) in brightness (intensity) between ridge lines and trough lines, included in said predetermined acquisition condition (column 10, line 47-54; column 11, line 16-26).

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15. Regarding claim 7, Setlak discloses that a brightness relationship judging section is provided to judge a relationship in brightness (intensity) between ridge lines and trough (valley) lines in said fingerprint information acquired through said biometrics information inputting section, and said biometrics information converting section conducts conversion processing of image data in accordance with the judgment of the brightness (intensity) relationship judging section (column 10, line 47-56; column 11, line 27-46).

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- USPN 4,086,567 to Crane et al. discloses a handwriting verification system using landmarks including normalizing an input signature segment to be the same size as a template signature segment.
- USPN 6,049,621 to Jain et al. discloses determining a point correspondence between two points in two respective (fingerprint) images wherein all pixel measures presuppose fingerprint image resolution of 512 dots per inch (dpi) and are appropriately scaled if the resolution of the given fingerprint is not 512 dpi.
- USPN 6,173,068 to Prokoski discloses a method and apparatus for recognizing and classifying individuals based on minutiae wherein standardizing database images facilitates comparison of imagery during growth from childhood to adulthood and provides a common reference for comparing images obtained from different sensors that produce different resolution images.

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17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan J Hesseltine whose telephone number is 703-306-4069. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan J. Hesseltine
March 8, 2005



JINGGE WU
PRIMARY EXAMINER